IN THE CLAIMS:

Please cancel Claims 1 and 6 without prejudice or disclaimer of subject matter, and amend Claims 2, 3, 5, 7, 8 and 10 as shown below. The claims, as pending in the subject application, read as follows:

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1. (Cancelled).

2. (Currently amended) An imaging sensor which includes: according to Claim 1,

a sensor array segmented into plural disjoint segments;

a respective plurality of output pipelines, one of said output pipelines corresponding to each of said plural segments of the sensor array; and

means for duplicating image data for an overlap region at each boundary between segments,

wherein said means for duplicating image data comprises charge or voltage duplicating circuitry that obtains multiple outputs for each pixel in the overlap region, and wherein said duplication circuitry provides each of the multiple outputs to individual ones of said output pipelines that border on the overlap region.

3. (Currently amended) An imaging sensor which includes: according to Claim 1, further comprising

a sensor array segmented into plural disjoint segments;

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a respective plurality of output pipelines, one of said output pipelines

corresponding to each of said plural segments of the sensor array;

means for duplicating image data for an overlap region at each boundary

between segments; and

a respective plurality of processors, each processor coupled to a respective

one of the output pipelines, and

wherein said means for duplicating includes an output pipeline for

outputting pixel values of pixels in the overlap region to an intermediate buffer, the

intermediate buffer providing duplicate pixel values to each processor whose segment

borders the overlap region.

4. (Original) An imaging sensor according to Claim 3, wherein the

intermediate buffer is provided off-chip from the sensor array.

5. (Currently amended) An imaging sensor which includes: according to

Claim 1, further comprising

a sensor array segmented into plural disjoint segments;

a respective plurality of output pipelines, one of said output pipelines

corresponding to each of said plural segments of the sensor array;

means for duplicating image data for an overlap region at each boundary

between segments; and

a respective plurality of processors, each processor coupled to a respective

one of the output pipelines, and

wherein said means for duplicating comprises a communication link between processors that border the overlap region, and wherein duplicate pixels are communicated between processors over the communication link.

6. (Cancelled).

7. (Currently amended) A method ~~according to Claim 6, wherein said step of duplicating image data~~ in an imaging sensor which includes a sensor array segmented into plural disjoint segments including at least a first segment and a second segment separated by a boundary, the method comprising the step of:

duplicating image data for an overlap region at the boundary, which further comprises the steps of:

storing charges or voltages from a non-overlap region of the first segment into a output pipeline;

storing charges or voltages from the overlap region of the first segment and the second segment into the output pipeline; and

providing charges or voltages from the output pipeline to a processor.

8. (Currently amended) A method ~~according to Claim 6,~~ in an imaging sensor which includes a sensor array segmented into plural disjoint segments including at least a first segment and a second segment separated by a boundary, the method comprising the step of:

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duplicating image data for an overlap region at the boundary, which ~~wherein said step of duplicating image data~~ further comprises the steps of:

storing charges or voltages from a non-overlap region of the first segment into a pipeline;

sending charges or voltages from the overlap region of the first segment and the second segment to a shift out line;

storing charges or voltages from the shift out line to an intermediate buffer; and

providing charges or voltages from the pipeline and from the intermediate buffer to a processor.

9. (Original) A method according to Claim 8, wherein the intermediate buffer is provided off-chip from the sensor array.

10. (Currently amended) A method ~~according to Claim 6,~~ in an imaging sensor which includes a sensor array segmented into plural disjoint segments including at least a first segment and a second segment separated by a boundary, the method comprising the step of:

duplicating image data for an overlap region at the boundary, which ~~wherein said step of duplicating image data~~ further comprises the steps of:

storing charges or voltages from the first segment into a pipeline;

providing charges or voltages from the pipeline to a first processor, the first processor for processing pixel data for the first segment; and

communicating pixel data for the overlap region between the first processor and a second processor, the second processor for processing pixel data for the second segment.